Frank Files

BARRICK MERCUR GOLD MINES, INC.

March 25, 1987

Mr. Lowell P. Braxton
Administrator
Mineral Resource Development and Reclamation Program
Utah Department of Natural Resources
Division of Oil, Gas & Mining
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203

Dear Lowell:

SUBJECT: 1986 Annual Report, Mercur Mine
ACT/045/017
Tooele County, Utah 84074

Please find attached the completed "Annual Operations and Progress Report" for Barrick's operations in Mercur Canyon. Also submitted is the following supporting information:

- Map 2.4-2(A), Post Reclamation Configuration - Surety Bond Reference, Barrick Mercur Gold Mines, Inc.

- Barrick Mercur Gold Mine, General Layout - End 1986 (w/topsoil and runoff control details).

- Barrick Mercur Gold Mines, Inc., Mercur Gold Mine - End of 1986 Disturbance Map (Mercur Pit only).

- Document entitled "Site Revegetation Test Program, 1986 Annual Evaluation and Implementation," Barrick Mercur Gold Mines - Mercur Gold Mine.

As indicated in the report, no revegetation activity was conducted during 1986, with the exception of the tailings research plot. A combination of factors accounted for this situation, but primarily they were the development of the ACT/045/017 permit modification, construction activities, personnel scheduling, and budgeting. As noted, a hydroseeder unit has been purchased which will afford us the opportunity to conduct revegetation work on an independent basis. Areas scheduled for research work this season include the lower Sacramento dump slope, topsoil piles, drill sites and roads, access road outslopes, and some areas for aesthetic purposes only.

P.O. Box 838, Tooele, Utah 84074 Telephone (801) 268-4447

The situation that exists involving the salvaged topsoil quantity discrepancy will be resolved upon completion of the topsoil stockpile survey. Apparently, previous contractor estimates of topsoil removed as measured by load count method may have overestimated the quantity actually salvaged. Any further contractor removal will be verified by survey rather than load count.

Please feel free to contact me at extension 313 should you have any questions concerning this submittal. As always, your cooperation is certainly appreciated.

Respectfully,

Glenn M. Eurick
Environmental & Occupational Health Coordinator

GME/cg

Attachments

cc: F. Wicks
C. Landa
D. Beatty
T. Faddies

MR Form 3
(Revised 1984)

RECEIVED
MAR 31 1987

DIVISION OF
OIL, GAS & MINING

ANNUAL OPERATIONS AND PROGRESS REPORT

From Month/Year January 1986
to Month/Year December 1986

(To be submitted for each mining operation at the end of each calendar year to the Division at this address:)

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
(801) 538-5340

OPERATOR: Barrick Mercur Gold Mines, Inc. MINE NAME: Mercur

ADDRESS: Mercur Canyon Road, Tooele County, Utah 84071
P.O. Box 838, Tooele, Utah 84074

PERMIT NUMBER AND DATE OF PERMIT: ACT/045/017 Rev. 121

REPRESENTATIVE: Glenn M. Eurick, Environmental & Occupational Health Coordinator

SECTION(S): All or parts of 4,5,6,7,8,9 TOWNSHIP(S): 6S RANGE(S): 3W

MINERAL(S) MINED: Gold Ore

STATE AND/OR FEDERAL MINERAL LEASE NUMBERS: N/A

SPECIAL USE PERMITS AND/OR RIGHTS-OF-WAY: BLM-ROW:U47282. Tooele County Conditional Use: 700-81. (Also Zoning, Road R.O.W. & Maintenance Agreement)

Section 40-8-15 and Rule M-8 of the Utah Mined Land Reclamation Act, requires each operator to include with this report an up-dated map and plan prepared in accordance with Rule M-3, as outlined in the requirements for annual report maps in Appendix I, providing a detailed status of all mining and reclamation activities which have occurred during the past year.

The report should include:

MINING:

(a) Tabulation of acreage disturbed (by pits, roads, facilities, etc.) during the report period with illustration on a current map.

Disturbance	(Estimated) Acreage
Pit	95.6
Roads	31.8 (Pit)
Facilities	30
Waste Dumps (w/Faces)	140.6 (w/Dump Leach 1)
Other	450 (All Other Areas)

(b) Tabulation of acreage affected to date (by years).

Date by Year	Acreage (Total
1975	
1976	
1977	
1978	
1979	
1980	
1981	
1982	
~~1983~~ 1986	±750 Total All Areas to 12/31/86 (Est.)

(c) Tabulation of all topsoil (new) stockpile volumes (see chart below) and date of stockpiling.

SOIL TABULATION CHART

Area Affected (in mining sequence) (If more space is needed, please attach.)	Area 1	2	3	etc.
Acreage of Area	--			
Depth of Topsoil Removal (inches)	±10" Avg. All Available Areas			
Depth of Topsoil Replacement (inches)*	None to Date			
Estimate of Topsoil Volume Salvaged (yd^3 or ac ft)	--			
Volume Actually Salvaged (yd^3 or ac ft)	515,161 BCY (1)			
Volume Required for Reclamation (yd^3 or ac ft)	Unknown			
Surplus or Deficit Volume (yd^3 or ac ft)	Unknown			
Storage Status (short- or long-term)	Unknown			

(1) Volume derived from survey, truck-count, and planimeter data. A discrepancy exists between truck-count and planimeter data, therefore all topsoil piles will be surveyed for volume and surface area in April-May, 1987.

Soil Tabulation Chart (continued)

Area Affected (in mining sequence)	Area 1	2	3	etc.
Storage Location	See Attached Drawing			
Area Where Soil Has Been Used (if not stored)	Experimental Plot 1985			
Running Total (all stockpiles) (yd^3 or ac ft)	± 515,161 BCY			
Short-term	0			
Long-term	515,161(2)			

*Of previously stripped area recently reclaimed.

(d) Tabulation of all (newly removed) out-of-pit spoil volumes, date of placement and illustration on a map.

Area	Date	Acreage
All spoils depicted on 1986 disturbance map.		

(e) Tabulation of quantity of commodity mined.

	Commodity	Tonnage
(Mined)	Ore and Waste Total 1986	10,556,774
(Milled)	Ore (Only) Total 1986	2,011,447

(f) Description of any new construction during the report period with illustration on a map, including, but not limited to:

1. Buildings and support facilities.
   None

2. Roads.
   See attached drawings for current status.

(2) See Note 1, Page 2

3. Diversion ditches, collector ditches, interceptor ditches, etc.

None

4. Culverts.

None

5. Sediment ponds, containment ponds.

None

6. Monitoring sites (vegetative, air quality, surface subsidence, surface water or ground water, etc.).

None

7. Topsoil stockpiles.

Topsoil from tailings area construction placed @ tailings area. (See attached map.)

(g) Description of any environmental problem areas with a proposed plan for mitigation and illustration on a map, including, but not limited to:

1. Pit stability problems.

None

2. Subsidence.

None

3. Accidental water discharge, dam failure, etc.

None

4. Slumping, sliding or erosion.

Minimal

5. Revegetation problem areas.

Not Applicable

6. Existence and location of unsuitable (toxic) overburden.

None

RECLAMATION:

(a) Tabulation of the acreage reclaimed during the report period with illustration on a map, distinguishing between:

1. Backfilled, graded and contoured areas.

Area	Acreage
None	

2. Topsoiled areas.

Area	Acreage
None	

3. Seeded areas.

Area	Acreage
None	

4. Reseeded areas (areas previously seeded, then seeded again).

Area	Acreage
None	

(b) Tabulation of total acreage reclaimed (seeded with permanent seed mix) to date by years with illustration on an updated map:

Year	Acreage
1975	
1976	
1977	
1978	
1979	
1980	
1981	
1982	
1983	
~~1984~~ 1986	5.0± Total 1982 Through 1986

(c) Description of the reclamation procedures used during the report period, including:

1. Average depth of topsoil applied.

N/A

2. Type of seed (species) used for seeding during the report perica.

N/A

3. Date of seeding during the report period.

Spring N/A

Fall N/A

4. Seeding procedures used.

(Hand broadcast or drilled or any other).

N/A

5. Rate of seed application.

Pounds Per Acre of Pure Live Seed (PLS) (if varied, please explain)

N/A

6. Type and rate of fertilizer applied.

N/A

7. Type and rate of mulch applied.

N/A

8. Rate of irrigation water applied, if any. Please describe any type of sprinkling, or water applied (water truck, etc.).

N/A

9. Revegetation test plot information.

(Cover, density, productivity, etc.)

See Attached Report

10. Soil analysis results.

None

(d) Description of results of previous revegetation efforts, including: (This should be done as applicable.)

1. Types (species) of seed that have germinated and are growing.

Tall wheatgrass still predominant on sedimentation ponds and topsoil piles. Weed encroachment present all sites. (See Experimental Plot Report for additional details.)

2. Types (species) of seed that are not growing successfully.

(See Experimental Plot Report.)

3. Areas experiencing problems with weeds and weed types.

All areas experiencing weed encroachment.

4. Significant erosional problems.

None

5. Areas of unsuitable overburden on the surface as related to revegetation failure.

None

6. Procedures used or proposed to correct these problems.

None

7. Acreage and dates of release (upon inspection by the State) of revegetated areas.

Area	Date	Acreage
None		

8. Results of soil analysis.

None

(e) Summarization of the reclamation costs incurred during the report period, including itemized costs for each operation (i.e., grading, topsoil replacement, seeding, etc.) and for each type of disturbance (i.e., spoil, haul roads, facilities removal, etc.) on a per acre basis.

	Acres	Cost/Acre
1. Grading	N/A	N/A
2. Backfilling		
3. Contouring		
4. Topsoil Replacement		
5. Seeding		
A. Seedbed Preparation		
B. Mulch		
C. Fertilizer		
D. Seed		
6. Other		

BOND INFORMATION:

A. An updated bond estimate should be included, if required in the Division's approval of the Mining and Reclamation Plan (MRP) or if changes to the MRP have occurred, including a detailed itemization of actual/estimated reclamation costs as outlined in the RECLAMATION section above. The date of the release of revegetated areas from further responsibility for a partial bond release, if applicable, should also be included.

	Amount	Type	Date Posted
Present Bond	$\$6.657 \times 10^6$	Self	12-17-86

Increased disturbance, if any:

See Attached

Increased Bond Amount (attached reclamation estimate).

B. Bond release. N/A

Acres	Bond Amount Released	Date

ADDITIONAL INFORMATION:

Supply any additional information as requested by the Division related to:

(a) Permit stipulations (status).
(b) Other special conditions (status).

- M&RP and bond for ACT/045/017 approved 12-17-86 to include Marion/Sacramento/ Golden Gate Pits.

- Barrick purchased 800G hydroseeder unit for $11,500 in January 1987.

- Barrick seeded ±1 acre of disturbed drilling sites in Rush Valley in 1986 per agreement with private land owner.

- Barrick established experimental plots for tailings research in September 1986.

- Barrick shipped 500 gallons of tailings to B.Y.U. for tailings reclamation research.

APPENDIX I

ANNUAL REPORT MAPS

1. Maps must be clear and legible contour maps or recent aerial photos. The scale should be 1 inch = 500 feet to adequately show topographic features.

2. Map sheets should be of a reasonable size, not to exceed 48 inches on a side.

3. Maps must have a title block with:

   A. Map title.
   B. Name and address of permittee.
   C. Permit and amendment numbers.
   D. Annual report period.
   E. Scale, north arrow, contour interval, date of photography, etc.

4. All maps must show:

   A. Legal subdivisions.
   B. Permit area boundary clearly shown and labelled.
   C. Amendment areas clearly shown and labelled.
   D. Contour features.

5. The following features should all be clearly identified:

   A. Topsoil stockpiles (numbered and with volumes).
   B. Settling ponds and sediment control structures.
   C. Haul roads.
   D. Pits identified by location, name, number, etc.
   E. Ramps (numbered).
   F. Out-of-pit spoil dumps.
   G. All waste disposal sites including, but not limited to:
      1. Landfill sites.
      2. Carbonaceous waste dumps.
   H. Diversion ditches.
   I. Monitoring sites.

6. All areas to be affected by mining and reclamation in the coming year should be outlined and labelled.